



Exelon Generation®

10CFR 50.55a

January 17, 2013

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Peach Bottom Atomic Power Station (PBAPS), Unit 2  
Renewed Facility Operating License No. DPR-44  
NRC Docket Nos. 50-277

Subject: Submittal of the Inservice Inspection (ISI) Owner's Activity Report for the  
19<sup>th</sup> Refueling Outage for Unit 2

Attached is the ISI Owner's Activity Report covering ISI activities associated with the first period of the current ISI inspection interval for Unit 2. This report is submitted pursuant to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for the Inservice Inspection of Nuclear Power Plant Components," Article IWA-6200, "Requirements" (2001 Edition through 2003 Addenda) and ASME Code Case N-532-4 (Repair/Replacement Activity Documentation Requirements and In-Service Summary Report Preparation and Submission, section XI, Division 1).

If you have any questions or require additional information, feel free to contact Jeremy Searer at 717-456-4771.

Sincerely,

Timothy A. Moore  
Director – Site Engineering  
Peach Bottom Atomic Power Station

Attachment

cc: USNRC Region I, Regional Administrator  
USNRC Senior Resident Inspector, PBAPS  
USNRC Project Manager, PBAPS  
R. R. Janati, Bureau of Radiation Protection  
S. T. Gray, State of Maryland  
CCN: 13-05

AD47  
NRC

# PEACH BOTTOM ATOMIC POWER STATION, UNIT No. 2 – P2R19 OAR REPORT

## FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number P2R19

Plant Peach Bottom Atomic Power Station, 1848 Lay Road, Delta, PA 17314

Unit No. 2 Commercial Service Date July 5, 1974 Refueling Outage No. 19

Current Inspection Interval ISI = Fourth / CISI = Second

Current Inspection Period ISI = First / CISI = First

Edition and Addenda of Section XI Applicable to the inspection plans 2001 Edition through 2003 Addenda

Date and revision of inspection plan 12/14/2011 Rev 2

Edition & Addenda of Section XI Applicable to repairs and replacements, if different than the inspection plan  
2001 Edition through 2003 Addenda

Code Cases used: N-460, N-513-3, N-532-4, N-578-1, N-700 & N-702

### CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of P2R19 conform to the requirements of Section XI.

Signed Jeremy Searer Jeremy Searer, ISI Program Owner Date 1/16/2013  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commissions NB7592, PA2163, A, N, E  
National Board, State, Province, and Endorsements

Date 1/16/2013

**TABLE 1**

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**ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE  
FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
(END OF P2R19 REFUEL OUTAGE)**

<b>Examination Category</b>	<b>Item Number</b>	<b>Item Description</b>	<b>Evaluation Description</b>
F-A	F1.20	10GB-H61 Rigid Restraint	Relevant Condition – Deformation to the support plate. IWF-2430 additional examinations were completed, and as-found condition was accepted by engineering. Ref IR # 1419829
B-A	B1.22	CH-MB Closure Head Meridional Weld	This weld has been successfully inspected in three successive periods since relevant indications were identified and evaluated. Indications were identified in P2R14, successive examinations were completed in P2R15, P2R17, P2R19. It has been determined through GE evaluation, DRF-0000-0151-0155, that the flaws or relevant conditions have remained essentially unchanged over the three successive examinations thus the component examination schedule will revert back to the original schedule. Ref IR 1424663-01

TABLE 2

**ABSTRACT OF ASME REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES  
FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 01: MAIN STEAM AND TURBINE SYSTEM**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 1	Replacement	RV-2-02-071A	Installed a rebuilt safety relief valve	No	9/17/2012	11-115, C0238867
Class 1	Replacement	RV-2-02-071D	Installed a rebuilt safety relief valve	No	9/17/2012	11-162, R1181767
Class 1	Replacement	RV-2-02-071H	Installed a rebuilt safety relief valve	No	9/17/2012	11-163, R1114313
Class 1	Replacement	RV-2-02-071F	Installed a rebuilt safety relief valve	No	9/17/2012	11-164, R1114314
Class 1	Replacement	RV-2-02-071G	Installed a rebuilt safety relief valve	No	9/17/2012	11-165, R1114317
Class 1	Replacement	RV-2-02-071B	Installed a rebuilt safety relief valve	No	9/17/2012	11-166, R1114322
Class 1	Replacement	RV-2-02-070B	Installed a rebuilt safety relief valve	No	9/17/2012	11-167, R1114326
Class 1	Replacement	RV-2-02-071E	Installed a rebuilt safety relief valve	No	9/17/2012	11-168, R1114864
Class 1	Repair	Target Rock RV's	NWS Technologies install thermowell hole on safety vlv	No	6/21/2012	12-088, N/A
Class 1	Replacement	RV-2-02-070A	Installed a rebuilt safety relief valve	No	10/7/2012	12-108, R1181769

**SYSTEM 03: CONTROL ROD DRIVE**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 1	Replacement	CRD's 02-23, 06-19, 06-23 14-47, 18-07, 18-23, 18-59, 22-43, 26-15, 30-11, 30-19, 30-47, 30-59, 38-27, 42-31 42-39, 46-15, 46-47, 50-11	Exchanged CRD's with rebuilt CRD's	No	10/9/2012	12-066, R1193249

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FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 07: PRIMARY CONTAINMENT**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class M	Replacement	N-200A	Installed new stud on Suppression Chamber Hatch	No	10/15/2012	12-056, R1180470
Class M	Repair	20S019	Weld repaired torus ring girder to shell fillet weld	No	9/28/2012	12-107, C0245015
Class M	Repair	20S019	Repaired torus stiffener to ring girder fillet weld	No	10/4/2012	12-113, C0245090
Class M	Repair	20S019	Repaired T-Quencher support weld	No	10/4/2012	12-114, C0245092
Class M	Repair	20S019	Repaired T-Quencher support weld	No	10/5/2012	12-115, C0245093

**SYSTEM 08: OFFGAS AND RECOMBINER**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	HV-2-08-43037	Installed leak repair injection ports in bonnet	No	11/1/2010	10-177, C0235368
Class 2	Replacement	HV-2-08-43037	Installed new valve	No	9/26/2012	10-186, C0235369

**SYSTEM 10: RESIDUAL HEAT REMOVAL**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	MO-2-10-026A	Installed new valve	No	9/28/2012	10-043, C0226534
Class 2	Replacement	PB-2-10-2DE024	Replaced Hx Head Studs and Nuts	No	4/18/2012	11-074, R0974619
Class 2	Replacement	RHR DECON PORTS	Install RHR Decon Ports per ECR 11-00352	No	5/9/2012	11-126, C0239756
Class 2	Replacement	PB-2-10-2AE024	Installed new Hx. Floating Head, machined gasket surface	No	9/22/2012	12-017, C0241455
Class 2	Repair	PB-2-10-2DE024	Weld repaired and machined Hx gasket surface	No	9/11/2012	12-076, C0241731
Class 2	Replacement	RV-2-10-072A	Installed new RHR Pump 2AP035 Suction Relief Valve	No	9/20/2012	12-077, R1191754
Class 2	Replacement	RV-2-10-072B	Installed new RHR Pump 2BP035 Suction Relief Valve	No	9/27/2012	12-078, R1191762
Class 2	Replacement	RV-2-10-072C	Installed new RHR Pump 2CP035 Suction Relief Valve	No	9/17/2012	12-079, R1191765
Class 2	Replacement	RV-2-10-072D	Installed new RHR Pump 2DP035 Suction Relief Valve	No	9/27/2012	12-080, R1191768
Class 2	Replacement	MO-2-10-031B	Replaced valve bonnet nuts and studs	No	10/8/2012	12-125, C0245137

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FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 11: STANDBY LIQUID CONTROL SYSTEM**

<u>Code</u> <u>Class</u>	<u>Repair,</u> <u>Replacement,</u> <u>or Corrective</u> <u>Measure</u>	<u>Item Description</u> <u>(component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant</u> <u>Condition Found</u> <u>During Scheduled</u> <u>Section XI Exam</u> <u>Or Test</u>	<u>Date</u> <u>Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	RV-2-11-39B	Installed new relief valve	No	9/23/2012	12-063, R1185223

**SYSTEM 14: CORE SPRAY SYSTEM**

<u>Code</u> <u>Class</u>	<u>Repair,</u> <u>Replacement,</u> <u>or Corrective</u> <u>Measure</u>	<u>Item Description</u> <u>(component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant</u> <u>Condition Found</u> <u>During Scheduled</u> <u>Section XI Exam</u> <u>Or Test</u>	<u>Date</u> <u>Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	RV-2-14-020B	Installed new relief valve	No	6/12/2012	10-194, R0981050

**SYSTEM 23: HIGH PRESSURE COOLANT INJECTION SYSTEM**

<u>Code</u> <u>Class</u>	<u>Repair,</u> <u>Replacement,</u> <u>or Corrective</u> <u>Measure</u>	<u>Item Description</u> <u>(component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant</u> <u>Condition Found</u> <u>During Scheduled</u> <u>Section XI Exam</u> <u>Or Test</u>	<u>Date</u> <u>Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	VRV-2-23C-4998A	Installed new vacuum relief valve	No	1/20/2011	08-150, R0897288
Class 2	Replacement	RV-2-23B-034	Installed new relief valve	No	1/19/2011	10-178, R0989045
Class 2	Replacement	MO-2-23-014	Replaced valve bonnet stud	No	9/26/2012	10-042, C0231906
Class 1	Replacement	AO-2-23-018	Replaced 4 valve bonnet studs	No	9/23/2012	10-062, R0917376
Class 2	Replacement	MO-2-23-014	Replaced valve bonnet and valve bonnet studs	No	9/29/2012	12-109, C0231906

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**ABSTRACT OF ASME REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES  
FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 27G: TORUS WATER TRANSFER**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 2	Replacement	Torus Penet. N-213A	Installed new torus penetration flange studs, tie in piping	No	10/9/2012	12-013, C0241383

**SYSTEM 32: HIGH PRESSURE SERVICE WATER SYSTEM**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 3	Replacement	RV-2-32-180A	Installed new RHR Hx. 2AE024 Tube Side Relief Valve	No	1/26/2011	09-121, R0959148
Class 3	Replacement	32GB-H27, 32GB-S59	Install Shims in supports 32GB-H27, and 32GB-S59	No	12/29/2010	10-137, C0234142
Class 3	Replacement	HV-2-32-516A	Install branch connections on 18" HPSW elbow/reducer	No	10/7/2012	12-111, C0245076
Class 3	Replacement	2-32GB-S50A & S67	Modify 2-32GB-S50A and install new 2-32GB-S67	No	8/28/2012	12-096, C0242743

**SYSTEM 33: EMERGENCY SERVICE WATER**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 3	Replacement	CHK-0-33-515A	Install branch connections over min wall on 20" ESW pipe	No	3/15/2011	10-140, C0234255
Class 3	Replacement	Excavation Site #1, Grid A4	Install branch connection over min wall on 20" ESW pipe	No	12/8/2010	10-190, C0235811
Class 3	Replacement	Excavation Site #2, Grid C1	Install branch connection over min wall on 20" ESW pipe	No	12/8/2010	10-191, C0235747
Class 3	Replacement	Excavation Site #2, Grid B6	Install branch connection over min wall on 20" ESW pipe	No	12/8/2010	10-192, C0235818
Class 3	Replacement	Excavation Site #4, Grid B12	Install branch connection over min wall on 16" ESW pipe	No	12/8/2010	10-193, C0235861
Class 3	Replacement	Excavation Site #4, Grid A5/6	Install branch connection over min wall on 16" ESW pipe	No	12/8/2010	10-199, C0235916
Class 3	Repair	Excavation Site #1, Grid A4	Remove linear indication at Grid A4 branch location	No	12/6/2010	10-203, C0235811

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FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 33: EMERGENCY SERVICE WATER (continued)**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 3	Repair	Excavation Site #2, Grid B6	Remove linear indication at Grid B6 branch location	No	12/7/2010	10-204, C0235818
Class 3	Replacement	ISO-2-33-101-R01-D/S-B09	Install branch connection over min wall on 16" ESW pipe	No	3/17/2011	11-004, C0236145
Class 3	Replacement	HV-0-33-11436	Install hot tap drain connection on 12" ESW pipe	No	3/17/2011	11-004, C0236145
Class 3	Replacement	HV-0-33-11435	Install hot tap drain connection on 20" ESW pipe	No	3/17/2011	11-005, C0236146
Class 3	Replacement	HV-0-33-519C	Install new valve and associated piping	No	12/9/2011	11-010, C0239971
Class 3	Replacement	20" ESW Piping	Install branch connection over min wall on 20" ESW pipe	No	3/13/2012	11-023, C0236144
Class 3	Replacement	Excavation Site #6, Grid B6	Install branch connection over min wall on 16" ESW pipe	No	8/9/2011	11-112, C0237164
Class 3	Replacement	Excavation Site #7 multi grids	Install branch connections on 12", 16", and 18" ESW pipe	No	8/9/2011	11-113, C0237165
Class 3	Replacement	HV-0-33-519B	Installed new valve	No	3/29/2012	12-008, C0240520
Class 3	Replacement	HV-0-33-504B	Installed new valve	No	3/30/2012	12-009, C0241241
Class 3	Replacement	HV-2-33-503	Installed new valve bonnet studs	No	9/24/2012	12-012, C0241348

**SYSTEM 65A: HYDRAULIC SNUBBERS**

<u>Code Class</u>	<u>Repair, Replacement, or Corrective Measure</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Flaw or Relevant Condition Found During Scheduled Section XI Exam Or Test</u>	<u>Date Complete</u>	<u>R&amp;R Plan # and W/O #</u>
Class 3	Replacement	1-GG-S-16	Installed new hydraulic snubber and extended rod eye	No	9/21/2012	12-042, C0241208
Class 3	Replacement	1-GG-S-33	Installed new hydraulic snubber	No	9/14/2012	12-043, C0241209
Class 3	Replacement	1-GG-S-64	Installed new hydraulic snubber	No	9/14/2012	12-044, C0241210
Class 3	Replacement	1-GG-S-76	Installed new hydraulic snubber	No	9/19/2012	12-046, C0241212
Class 1	Replacement	6-DDNL-S-11	Installed new hydraulic snubber	No	9/18/2012	12-049, C0241215
Class 1	Replacement	SS-A-3	Installed new hydraulic snubber	No	9/22/2012	12-051, C0241217
Class 2	Replacement	10-GB-S-52	Installed new hydraulic snubber	No	9/27/2012	12-052, C0241218
Class 2	Replacement	10-GB-S-43-2	Installed new hydraulic snubber	No	9/28/2012	12-053, C0241219
Class 3	Replacement	1-GG-S-12	Installed new hydraulic snubber	No	9/18/2012	12-058, R0475291
Class 2	Replacement	10-GB-S-44	Installed new hydraulic snubber	No	10/2/2012	12-112, C0245053



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FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2  
OCTOBER 9, 2010 TO OCTOBER 19, 2012  
( END OF P2R19 REFUEL OUTAGE )**

**SYSTEM 65B: MECHANICAL SNUBBERS**

<b>Code Class</b>	<b>Repair, Replacement, or Corrective Measure</b>	<b>Item Description (component I.D.)</b>	<b>Description Of Work Performed</b>	<b>Flaw or Relevant Condition Found During Scheduled Section XI Exam</b>	<b>Date</b>	<b>R&amp;R Plan # and W/O #</b>
				<b>Or Test</b>	<b>Complete</b>	
Class 3	Replacement	1-GG-S-205-B	Installed new mechanical snubber	No	9/14/2012	12-019, C0241184
Class 3	Replacement	1-GG-S-108-B	Installed new mechanical snubber	No	9/19/2012	12-020, C0241185
Class 3	Replacement	1-GG-S-209-A	Installed new mechanical snubber	No	9/12/2012	12-021, C0241186
Class 3	Replacement	1-GG-S-111-B	Installed new mechanical snubber	No	9/22/2012	12-023, C0241188
Class 3	Replacement	1-GG-S-111-A	Installed new mechanical snubber	No	9/22/2012	12-024, C0241189
Class 1	Replacement	SS-6-A	Installed new mechanical snubber	No	9/17/2012	12-025, C0241190
Class 2	Replacement	14-MO-H-57	Installed new mechanical snubber	No	9/25/2012	12-029, C0241195
Class 2	Replacement	10-GB-S-76	Installed new mechanical snubber	No	9/17/2012	12-030, C0241196
Class 1	Replacement	H-3LS-142-1	Installed new mechanical snubber	No	9/25/2012	12-031, C0241197
Class 1	Replacement	H-3LS-142-6	Installed new mechanical snubber	No	9/25/2012	12-032, C0241198
Class 1	Replacement	SS-2-A	Installed new mechanical snubber	No	9/17/2012	12-033, C0241199
Class 2	Replacement	23-HB-S-16	Installed new mechanical snubber	No	9/17/2012	12-036, C0241203
Class 1	Replacement	12-DCN-S-8-A	Installed new mechanical snubber	No	10/6/2012	12-124, C0245164